

Appl. No. : 09/514,999
Filed : February 29, 2000

REMARKS

Claim 10 has been amended to clarify the invention. Support for the amendment can be found in Examples 1-3 on pages 8-10, for example. Claims 11-15 has been added. Additional support for Claims 13-15 can be found in the first paragraph on page 3, for example, stating that the prior art has a problem in that not all polyamines cannot be recovered due to associated high molecular weight substances. Claims 4 and 5 have been amended to change their dependency in accordance with the above claim amendments. No new matter has been presented. Applicant respectfully requests entry of the amendments and reconsideration of the application in view of the amendments and the following remarks.

Claim Rejection - 35 U.S.C. § 112

Claims 2-8 and 10 have been rejected under 35 U.S.C. § 112, first paragraph. The Examiner asserts “the only reagent used in the samples is ‘sodium hydrate’, which is not a recognized alkali.”

However, as described at page 5, lines 19-20, as alkali, sodium hydrate and potassium hydroxide can be used. Further, Applicant believes that it is commonly known that sodium hydrate is in fact alkali. Sodium hydrate is a recognized alkali in the present specification as well as in the art. The Examiner’s assertion “the claims as written lack a proper written description and fail to provide a find proper enabling disclosure for one of skill in the art to make and use the invention as claimed” is groundless. Applicant respectfully requests withdrawal of this rejection.

Claims 2-8 and 10 have been rejected under 35 U.S.C. § 112, second paragraph. With regard to Claim 10, the Examiner asserts “a clause is omitted in this sentence, such as an indication of the time period of digestion or hydrolysis.”

Claim 10 has been amended to include the conditions based on the Examples 1-3. The claimed invention is not characterized by the time period of digestion or hydrolysis, but characterized by the high recovery of polyamines. It is well known that the results of enzymatic reactions depend not only on the time period but also on other conditions such as temperature, concentration, pH, etc. The time period is simply one of parameters, and cannot define by itself the claimed invention. As long as the conditions for the reactions are defined sufficiently, and the goal (which is an increase of the yield by 2-3.2 times) is clearly specified, the time element is not

Appl. No. : 09/514,999
Filed : February 29, 2000

essential. The Examples show full digestion, and full digestion can be reached in a significantly short time. Thus, the specification specifies that the solution is treated at 20-100°C for 0.1-24 hours (page 5, lines 18-19). Applicant respectfully traverses this rejection. However, Claim 10 has been amended to define the conditions more specifically. Applicant respectfully requests withdrawal of this rejection.

New Claims 13-15

Claim 13 recites "to dissociate substantially all of polyamines included in the yeast somatic components". The temperature, pH, concentration should be sufficient to define and conduct the claimed method if the reaction goal is defined. The claim is not instructions but defines the invention. Likewise, Claim 14 recites the increase in yield and should be sufficient to define the invention. Claim 15 recites "to separate polyamines from high molecular weight substances in the yeast somatic components to a degree achieved by" the particular conditions. In the prior art, polyamines were not fully separated, and the patentability resides in high recovery of polyamines.

CONCLUSION

In light of the Applicant's amendments to the claims and the foregoing Remarks, it is respectfully submitted that the present application is in condition for allowance. Should the Examiner have any remaining concerns which might prevent the prompt allowance of the application, the Examiner is respectfully invited to contact the undersigned at the telephone number appearing below.

Please charge any additional fees, including any fees for additional extension of time, or credit overpayment to Deposit Account No. 11-1410.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

Dated: December 19, 2003

By:



Katsuhiro Arai, Registration No. 43,315
Agent of Record
Customer No. 20,995
(949) 760-0404